LA-E4S Air Cushion Machine

Operation Manual
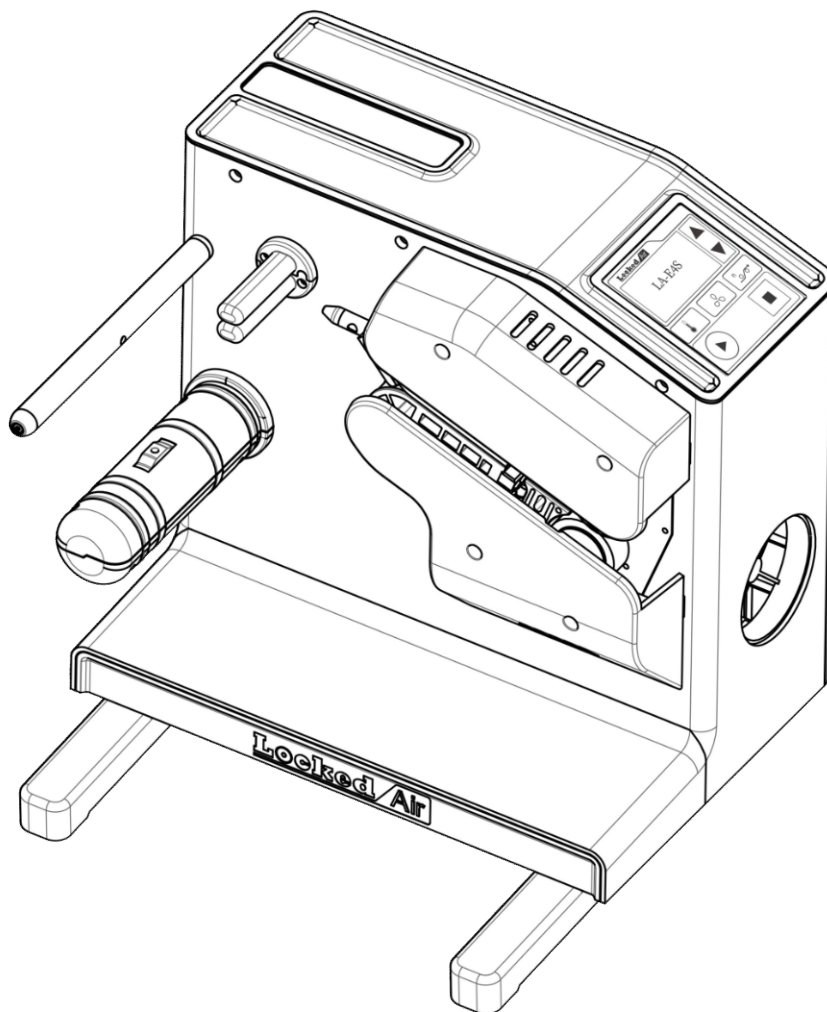
Abstract

Thank you for using LockedAir air cushion system. To ensure that you use the equipment correctly, be sure to read the instructions before you operate it!

Note: Operation of different models are slightly different, please pay attention to the tips mentioned below.

Warning

a. Power supply to machine must be consistent with the parameters on the machine nameplate, to prevent damage to the machine, please use only the power cable provided with the product.

b. Make sure that the power cable is reliably grounded.

c. Only trained person can open the back cover of the machine.

Security Matters

a. It is strictly prohibited to touch the high temperature warning area during the operation or within 5 minutes after the machine has been stopped.

b. When the machine is working, do not touch any rotating parts.

c. In the event of the following emergency, press the power switch quickly to cut off the total power supply of the machine.

● The air cushion film or other material rolls into the machine and the machine does not work properly.

● Abnormal sound inside the machine.

● Abnormal heating, temperature on the plastic surface is too high;
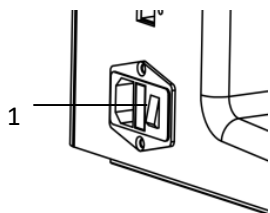
● Other exceptions

1. Main parameters of the device

| Item #	Name	Parameters
1	Power	See details on nameplate
2	Rate	380W
3	Maximum production speed	18m/min
4	Dimensions	300mmx360mmx345mm
5	Net weight	8.8kg
6	Working environment temperature.	0 to 40℃(32 to 104℉)
7	Working environment humidity.	20 to 90% RH

2. Operation Manual

2.1 Operating Procedures

2.1.1 Power on

a. Plug the power supply to a ground-protected single-phase three-wire socket.
b. Turn on the power switch 1.

2.1.2 Load the air cushion film
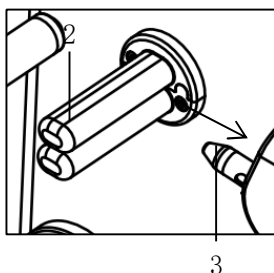
a. Place the air cushion film on the mandrel, with the inflatable end close to the machine, lead the film through the middle of the 2 guide film rods(2), and then sleeve the air cushion film opening to the nozzle(3), drag the film toward the arrow direction to reach the gap between upper and lower heating belts
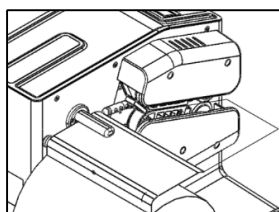
b. When the machine is in a stop state, press the loading button 9 to enter the film-loading mode, at this time the upper and lower belts will pull the air cushion film slowly forward to a certain distance and then stop automatically.

Tips:

a. Press loading button 9 again under the loading mode ,belt will stop rotating and exit loading mode.

b. Long press the loading button 9, the heating belt will keep running until the button is released.

c. When you press the start button 12 to start the machine, you will exit loading mode.
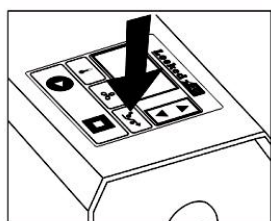
2.1.3 Parameter setting

Parameters Settings include temperature, air volume, speed and operating mode settings. In general, the parameters have been set before leaving factory. However, if you need to change the parameters, please refer to section 2.2 content.
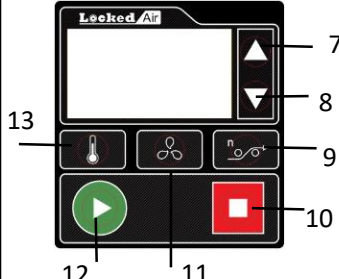
2.1.4 Start and Stop

a. **Start** Press start button 12 and the heating wire heats up. This process lasts 5 ~10s, depending on the environment temperature. The device starts after the temperature reaches the set value.

b. **Stop** Press Stop Button 10, Machine Stops, Heating Wire cools down.

Note: Do not touch any high temperature area and rotating parts of the machine during operation or within 5 minutes after the machine stops.

2.1.5 Power off

a. When the machine is in stop state, rip off the film close to the machine.

b. Long press the film loading button 9 to drain the air cushion film that remains in the machine.

c. Turn off power switch 1.

2.2 Control panel Instructions；

| Item#	Name.	Remark
7	Increase button	
8	Decrease button	
9	Film loading	
10	Stop button	
11	Air volume button	
12	Start button.	
13	Temperature button	

2.2.1 Main interface

TIME 05:00

The control panel displays as left picture when power on. The middle of screen shows current working mode，means the heating status，means working status，means film loading status .

TIME 05:00

The upper left interface indicates that the machine is stopped，press start button 12 ，machine displays the bottom left interface，start heating，machine starts to work when is full，and arrow starts to move .
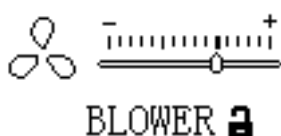
2.2.2 Set the temperature
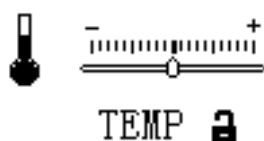
TEMP

Press temperature button 13 ，and enter temperature setting interface，press increase button 7 or decrease button 8 can increase or decrease the temperature under this interface.
    Note：thicker font is system default, same as below.

2.2.3 Set the air volume

BLOWER

Press air volume button 11 ，and enter air volume setting interface，press increase button 7 or decrease button 8 can increase or decrease the air volume under this interface.
    Note ： machine with external pump does not support this operation.

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2.2.4 Set the speed

Press temperature button 13 and decrease button 8, and enter speed setting interface, press increase button 7 or decrease button 8 can increase or decrease speed under this interface.

2.2.5 Parameter locking function

Locking function is available on the parameter of temperature, air volume and speed, which can be used to avoid wrong parameter due to incorrect operation.
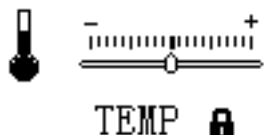
As shown in upper left figure, the "Lock" icon （ 🔒 ） displayed in parameter interface indicates that, this parameter has been locked already, and it is invalid to press "Increase" button 7 or "Decrease" button 8 at this time.

Unlock：After the parameter was locked, press "Stop" button10, you will hear continuous bumming, continue to press this button until the icon become , the parameter will be unlocked. Loose "Stop" button 10 to change this parameter.
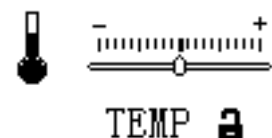
Lock：Press "Stop" button 10 in the parameter interface for a long time can lock the parameter manually. Or the machine will lock up automatically after a period of no button operation, parameters can not be set after being locked.

2.2.6 Set up Operation Mode
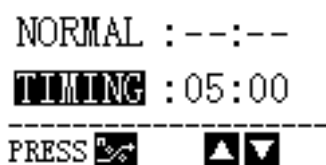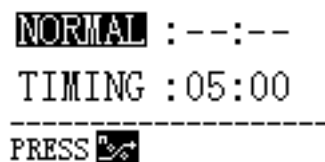
a. Press "Air volume setting" button 11 and "Decrease" button 8 in the main interface simultaneously to enter into selection interface of operation model.

b. Press "Trans-film" button 9 to shift from "Continuous model" to "Timing model".

c. If selected "Timing model", click or press "Increase" button 7 or "Decrease" button 8 for a long time enables to set the duration of timing.

d. After selected the operation model, press "Stop" button 10 to exit.

2.2.7 Select sizes

a. Press "Air volume" setting button 11 and "Decrease" button 7 simultaneously to enter into the interface of specification selection. Different specifications can be shifted by pressing "Increase" button 7 or "Decrease" button 8 for about 3 seconds, then the corresponding selected parameter will be displayed on the right side of interface and become valid immediately.

b. After selected the specification, press "Stop" button 10 to exit such interface, then the machine will run according to the selected parameters.

Note ： Specification is only required to be changed when

change the size of air cushion file. Do not change the parameter at random in any other cases.

2.2.8 Temperature correction

```
1.    MFB-B-11-21-10.0
TMP:230 F-BROKEN:OFF
BLW: 20 PRA-LOCK:ON
SPD: 100 TMP-A.A. : AT
```

Temperature display correction：

In the main interface state, press the temperature setting button 13 、air volume button 11 和 up arrow 7 at the same time，enter the engineering interface；

Choose the specification **MFB-B-11-21-10.0**，Press button 7 + button 8 at the same，enter the specification setting interface：

```
▌MFB- B-11-21-10.0
T.Re : 0  S.SP :7
```

In the specification setting interface，press air volume button 11 or trans-film button 9 to select the option to modify，including：

T.Re： Temperature display correction value，Correction range 0~99 （Actual temperature = display temperature + correction value）

S.Sp： Motor stop time，default is 7；（Note: No adjustment is recommended without professional guidance）

```
1.    MFB-B-11-21-10.0
TMP:230 F-BROKEN:OFF
BLW: 20 PRA-LOCK:ON
SPD: 100 TMP-A.A. : AT
```

Automatic temperature correction：It is suitable for the problem of output power reduction after long-time continuous work (>20min).

In the engineering interface, select the temperature automatic correction item **TMP-A.A.：** Including three values：

OFF（default）： Completely closed without correction

MT： Continuously open, no automatic switching correction mode for room temperature

AT： Automatic state, when the room temperature is ≤5°C, it will enter the 'cold state', and it will be displayed on the home page; when the room temperature is ＞ 8°C, it will enter the 'normal temperature state'

2.2.9 Auxiliary Function

```
TIME 05:00
```

In main interface, when the machine is stopped:

a. Click "Trans-film" button 9, the temperature of machine will not be increased, but the heating belt will run for trans-film assistance. After a certain length of film has been transported, the heating belt will be stopped automatically. Or you can click the "Trans-film" button 9 again to stop the machine manually.

```
TIME 05:00
```

b. Press the "Trans-film" button 9 for a long time, the temperature of machine will not be increased, but the heating belt will run continuously. Loose this button, the machine will stop, and the residue air cushion film can be exhausted from machine.

3. Fault analysis and diagnosis.
3.1 Common faults and troubleshooting

Item #	Issue	Cause analysis	Suggested solution
1	Seal Leakage.	Heating temperature is too low.	Raise the temperature setting.
2	Seal area is thin and easy to tear.	Heating temperature is too high.	Lower the temperature setting.

| 3 | The air volume is low. | The amount of wind is too small. | Increase the air volume setting. |
| 4 | Film break or film cut blurs | The blade is worn out. | Replace the blade. |

4. Transportation and Storage

1. 1. No severe vibration and shock is allowed during transportation.

2. Do not expose the machine directly under the sun or in rain. The machine shall be stored at the environment with the temperature range -25~+55℃ (-13~131℉) and with the relative humidity less than 90%RH.
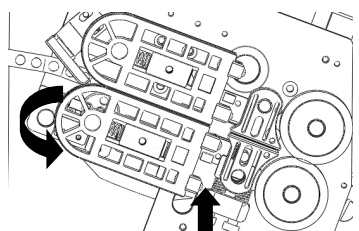
5. Appendix.

5.1 Replace heating belts

1. **Remove the upper and lower cover.**
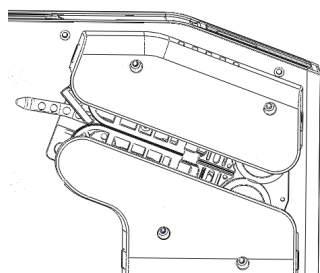
Loosen the 4 screws located on the upper and lower covers with a 3mm wrench and remove the upper and lower covers (2 on the upper cover and 2 on the lower cover).

2. **Lift the press wheel**.

● Turn the lower heating wire assembly counterclockwise to the defined position and dial the pull ring clockwise to separate the two silicone wheels.

3. Replace the belt
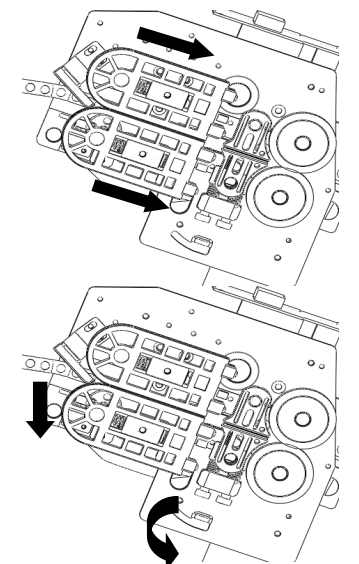
● Follow the arrow direction to push the upper heating wire mounting plate to the right, remove the heating belts from the right side, remove another heating belt in the same way.

● Load the new heating belt from the left and press to the heating belt block to install the heating belt. Install another one in the same way.

● Push lower heating wire assembly along the direction of the arrow to loosen the pull ring, dial the pull ring to reset the lower heating wire assembly

4. **Install the upper and lower cover**
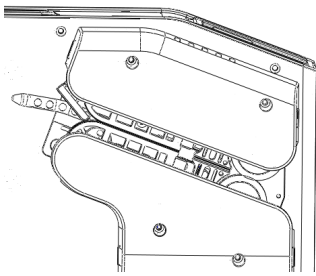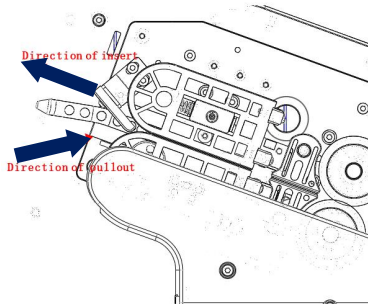
- Use a 3mm hex wrench to install the upper and lower cover with the 4 screws.

5.2 Replace the blade

- Loosen the blow nozzle fixing screw (no need to fully unscrewed), holds the end of the nozzle to pull it out in the direction of the arrow.
- Remove the blade screw, replaces the new blade (the blade is facing outwards), and tight the blade with screw **(Caution: Not to be cut by the blade).**

Push nozzle to the right in the direction of the arrow until the nozzle cannot move, fix the assembly with screw.

5.3 Replace the high temperature adhesive tape.
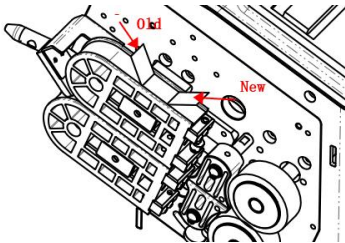
- Remove the heating wire assembly, be careful not to lose the small spring.
- Turn the upper heating wire assembly out for an angle to replace the adhesive cloth.
- Tear off the original high temperature adhesive tape by a part and then apply the new tape.